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ABOUT THIS REPORT

The following is a demographic profile of the Northwoods SCORP Region completed by the Applied Population Laboratory, University of Wisconsin- Madison. This profile was created to inform the 2005-2010 SCORP planning process by providing demographic background information for understanding the context within which outdoor recreation occurs. Similar demographic profiles are provided for each of the eight SCORP Regions, and one summary profile for the state of Wisconsin compares Region to Region.

The profile includes current, past and projected information on population demographics and housing within the Northwoods Region. Data are displayed in maps, tables, and charts and summarized briefly in text. We begin by painting a demographic picture of the current conditions in the Region using data from Census 2000 and from the Wisconsin Department of Administration's Population Estimates (2004). Next, we address historical trends that have shaped the Northwoods Region over the past several decades. We include information on how the population has been changing over time, where housing development has been rapidly occurring, and the impact that natural amenities may have on these changes. Finally, we use population projections from the Wisconsin Dept. of Administration to discuss how the population of the Northwoods Region might change over the next several years.

It is important for planners to consider demographic information when planning for outdoor recreation because characteristics of the population impact demand for different types of outdoor recreation. For instance, areas with growing populations may experience increasing demand for recreational resources, and areas with aging populations may demand different types of resources than those with young populations. Similarly, income, education, race, and sex have all been shown to affect preferences for outdoor recreation.

Starting in 1999, the Wisconsin DNR initiated a three-year study to identify, with considerable input from the public and non-profit groups, places in the state that will be critical in meeting Wisconsin's long-term conservation and recreation needs. The resulting 229 "Legacy Places" collectively are the special places that "make Wisconsin Wisconsin." The WDNR only represents the Legacy Places as points because specifically identifying which lands and waters associated with each place are most appropriate to maintain and protect is most appropriately left to a locally-focused planning process. The Legacy Places are represented on many of the maps that you will see in this report. The points noted with a star in the center are Legacy Places that the WDNR has determined to have particularly high recreation potential. The Land Legacy information helps to bring cultural and environmental meaning to the demographic data that we present.

The principal author of this report is Richelle Winkler (rwinkler@ssc.wisc.edu) of the Applied Population Laboratory, with direction provided by Jeff Prey (Jeff.Prey@dnr.state.wi.us) of the Wisconsin Department of Natural Resources. With appreciation and thanks, the author would like to acknowledge the insight and assistance provided by Chris Whelpley, David Long, Bill Buckingham, Dan Veroff, Nick Fisher, and Don Field. Each lent their skills and talents in preparing data, constructing tables and charts, formatting, and editing text. For more information about this report, the authors can be contacted via email.







EXECUTIVE SUMMARY

The Northwoods Region is located in the north-central part of the state and encompasses Florence, Forest, Iron, Langlade, Lincoln, Oneida, Price, Taylor, and Vilas Counties. The Region is mostly rural and sparsely populated. The closest metropolitan areas that impact the Region are Green Bay and Wausau. Both are relatively small population centers without a wide reaching impact. Visitors and seasonal residents from Milwaukee, Madison, and Chicago come to the Northwoods Region for recreation.

- In 2004, the Northwoods Region had an estimated population of 169,376 residents. The most populated municipalities in the Region include the cities of Merrill (Lincoln County), Antigo (Langlade County) and Rhinelander (Oneida County). Approximately 40% of the Region's residents live in Lincoln and Oneida Counties.
- Housing development is most dense in Oneida and Vilas Counties.
- The population of the Northwoods is mostly rural (about 77%).
- Almost 96% of the population is non-Hispanic and White. American Indians are the largest minority group, and they are concentrated in Forest and Vilas Counties.
- Several lakes and abundant forests attract seasonal residents, tourists, and in-migrating retirees to the Northwoods Region. About 34% of all housing units in the Region are for seasonal use, and almost 10% of all workers work in a tourism-related industry.
- In-migrating retirees and out-migrating young adults produce an aging population structure in the Northwoods Region. Median age for the Region in 2000 was over 41 years. The oldest county was Vilas, with a median age of almost 46 years. The population is expected to grow older in the coming years reaching a median age of almost 46 years for the Region (51 years for Vilas County) in 2010.
- In comparison with the rest of the state, people in the Northwoods are less educated, have lower income, and have relatively low housing values. Housing values vary tremendously within the Region. For instance, the median housing value in Vilas County (\$120,200) is higher than the state average (\$112,200); yet, the median value of housing is only \$58,900 in neighboring Iron County. Housing values are highest in lakes districts.
- Population in this Region has been growing since 1970, increasing by 33% 1970-2004. Forest, Oneida, and particularly Vilas Counties have been growing at a particularly quick pace.
- Housing development has been occurring at a faster rate than population growth. Between 1950 and 2004, the number of housing units in the Region has more than doubled (141% increase). Housing development occurred particularly fast in the 1970's, increasing by 48% over the decade.
- According to Johnson and Beale's recreational county classifications, Florence, Forest, Iron, Oneida,
 Price, and Vilas Counties have many recreation-based resources and high demand for recreation.
 Because of these resources, these counties might be expected to experience population growth and
 housing development at a disproportionately fast pace.
- Population is projected to continue to increase slowly in the Northwoods Region over the next several years, especially in Florence, Langlade, and Oneida Counties. The Region is expected to add 4,440 new residents, an increase of almost 2.6%, between 2004 and 2020. Langlade County is expected to add 1,017 residents, an increase of almost 5%.





POPULATION DISTRIBUTION

According to the Wisconsin Department of Administration population estimates (WDOA 2004), 169,376 people live in the Northwoods Region. This amounts to about 21 persons per square mile.

Figure 1 shows population distribution for the Northwoods Region by county. The least populated counties include: Florence, Iron, and Forest Counties. Lincoln and Oneida have the highest populations in the Region. Together they account for about 40% of the Northwoods' population. There are no major population centers in or bordering this Region.

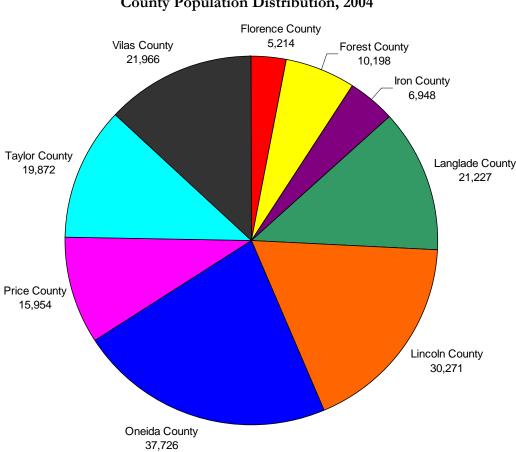


Figure 1
County Population Distribution, 2004

Figure 2 shows population density by municipality (cities, villages, and towns). This view allows us to see variation within counties. The majority of the landscape in the Northwoods Region is made up of low population density towns, scattered with small cities and villages that have higher population densities.

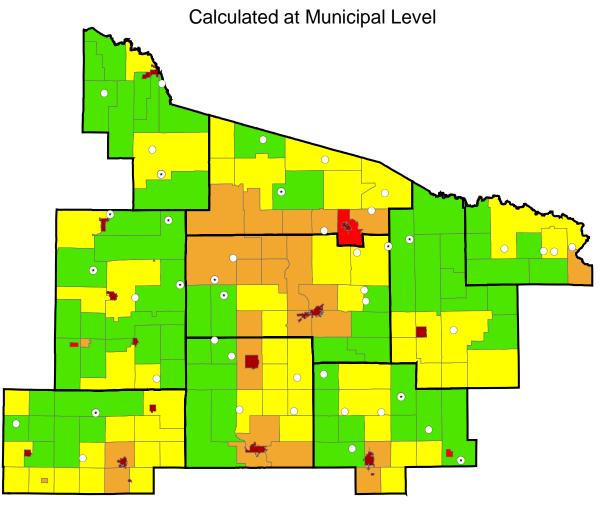


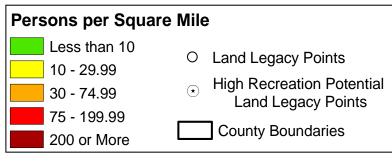


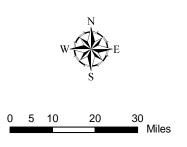


Figure 2

Population Density, 2004







Source: Tiger 2003, Wisconsin DOA 2004



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URBAN/RURAL

Most people in the Northwoods Region live in rural areas. Just over 23% of people live in urban areas, according to 2000 Census definitions. This includes people who live in densely settled territory with a population of 2,500 or more.

Table 1 shows the proportion of people living in urban places by county for the Northwoods Region. According to the Census definition, Florence, Forest, Price, and Vilas Counties did not have any urban areas in 2000.

Table 1
Urbanization in the Northwoods Region, 2000

	Total Population	Urban Population	Percent Urban
Florence County	5,088	0	0.0%
Forest County	10,024	0	0.0%
Iron County	6,861	2,180	31.8%
Langlade County	20,740	8,941	43.1%
Lincoln County	29,641	13,319	44.9%
Oneida County	36,776	9,645	26.2%
Price County	15,822	0	0.0%
Taylor County	19,680	4,204	21.4%
Vilas County	21,033	0	0.0%
Northwoods Region	165,665	38,289	23.1%

Source: Census 2000, Summary File 1







HOUSING DISTRIBUTION

Housing development impacts both the supply and the demand for outdoor recreation. Housing affects the *supply* of outdoor recreation resources by taking up land that may previously have been recreational or have potential for recreation activities. Outdoor recreation (especially those activities that require a substantial amount of open space, like backpacking, ATV riding, or hunting) is largely considered incompatible with higher density housing development.

Housing development also impacts *demand* for outdoor recreation. At the most basic level, housing development in an area generally means more people in that area who are likely to participate in some form of recreation activity nearby. In this way, housing unit counts inform outdoor recreation planners similarly to population counts.

Examining housing is especially useful to recreation planners because population counts do not include seasonal residents. Seasonal residents are an important component of demand for outdoor recreation in Wisconsin. And Looking at housing development (including both permanent and seasonal homes) can offer a more complete view of where demand for outdoor recreation occurs than looking at population distribution alone.

Figure 3 shows the 2000 distribution of housing density in the Northwoods Region by Census Block Group. The map looks similar to the population map presented above, except that the influence of seasonal housing stands out in Vilas and Oneida Counties.



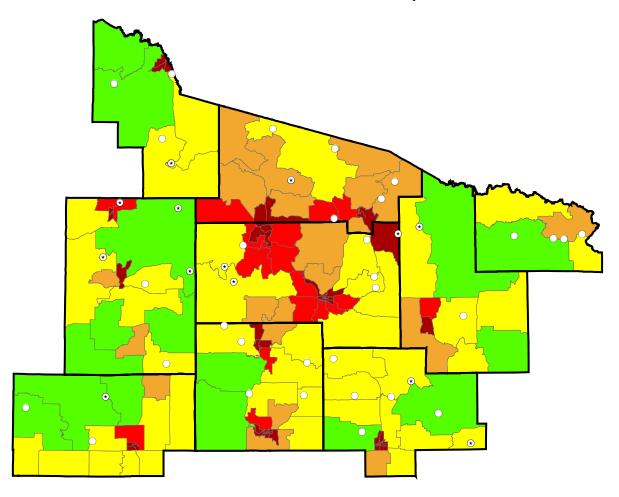


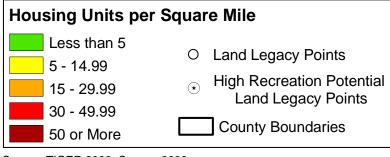


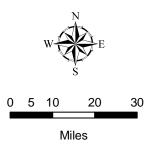
Figure 3

Housing Density, 2000

Calculated at Block Group Level











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SEASONAL HOUSING AND TOURISM

Area residents constitute much of the demand for outdoor recreation, but a certain amount of demand also comes from non-residents, like seasonal home-owners and tourists. Table 2 shows the importance of seasonal housing and tourism in the Northwoods Region. Seasonal housing is prominent in this Region, with about 34% of all housing units being for seasonal or recreational use, compared to only 6.3% for the state as a whole. In all but Taylor, Lincoln, and Langlade Counties, more than 1 in every 4 housing units is seasonal. In Vilas County, seasonal homes account for over half (56.2%) of all housing units.

Measuring the number of tourists who visit the Northwoods Region is more difficult because good data is not readily available. Table 2 shows the percent of all workers age 16 and over who are employed in arts, entertainment, recreation, accommodation, and/or food services industries. We provide this employment measure with the idea that the more tourists who are visiting an area, the more people will be employed in tourism-related work. Tourism-related employment is relatively important in the Northwoods Region and especially important in Forest, Iron, and Vilas Counties.

Table 2
Seasonal Housing and Tourism in the Northwoods Region, 2000

	Population	Housing Units	% Seasonal	% Employed in Tourism
Florence County	5,088	4,239	46.2%	8.7%
Forest County	10,024	8,322	46.3%	13.0%
Iron County	6,861	5,706	37.8%	13.5%
Langlade County	20,740	11,187	19.3%	9.4%
Lincoln County	29,641	14,681	13.3%	6.1%
Oneida County	36,776	26,627	39.2%	9.8%
Price County	15,822	9,574	26.3%	6.2%
Taylor County	19,680	8,595	8.2%	7.3%
Vilas County	21,033	22,397	56.2%	16.6%
Northwoods Region	165,665	111,328	34.4%	9.5%

Source: Census 2000, Summary File 1

Figures 4 and 5 show the distribution of seasonal housing and tourism at the Census Block Group level. These activities tend to be clustered together near lakes. In some areas (especially in Vilas and Forest County) the majority of all housing units are for seasonal use and at least 20% of all workers are employed in tourism-related industries.

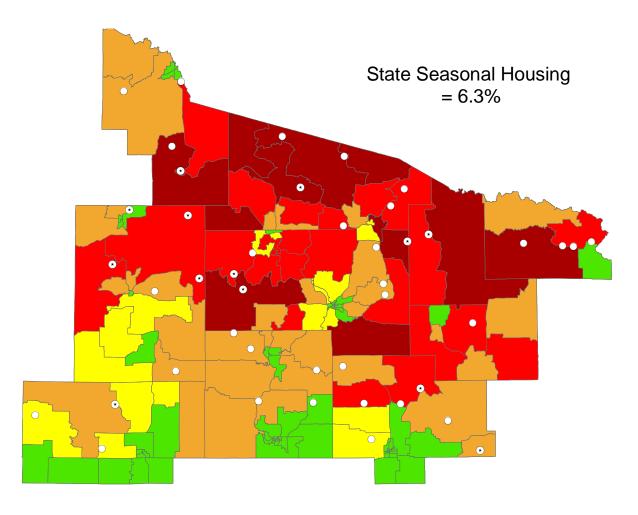


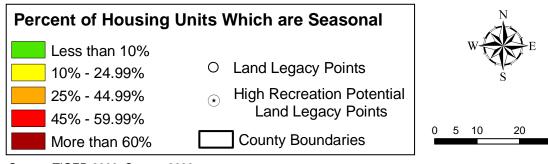


Figure 4

Seasonal Housing

Calculated at Block Group Level









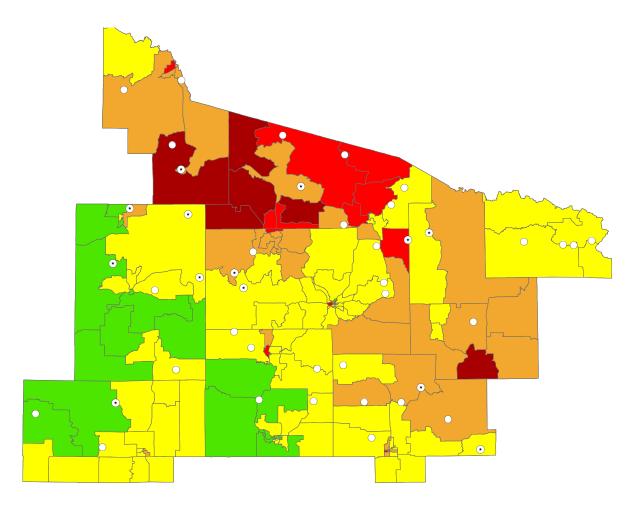


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Figure 5

Tourism Industry Employment

Calculated at Block Group Level



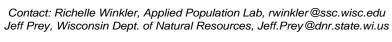


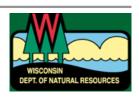






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DEMOGRAPHIC CHARACTERISTICS

Social and economic characteristics of the population also influence participation in outdoor recreation. For instance, older people tend to participate in different recreational activities than young people; income may influence ability to participate in particular outdoor activities, like golfing; and education may have something to do with whether or not someone engages in nature study. These types of social and economic characteristics of the population vary across space. Near urban centers, people tend to make more money; and near universities, people tend to be younger and more highly educated.

Table 3 provides a summary of social and economic characteristics by county. Figures 6-10 show how these characteristics vary across space.

Table 3
Demographic Characteristics in the Northwoods Region

	Total Population	Median Age	Female	College Educated	American Indian	Median HH Income	Median Housing Value
Florence County	5,088	41.9	49.0%	12%	0.4%	\$34,750	\$82,200
Forest County	10,024	39.9	50.0%	10%	11.3%	\$32,023	\$77,400
Iron County	6,861	45.0	51.0%	13%	0.6%	\$29,580	\$58,900
Langlade County	20,740	40.5	50.4%	12%	0.5%	\$33,168	\$68,600
Lincoln County	29,641	38.9	50.0%	14%	0.4%	\$39,120	\$86,500
Oneida County	36,776	42.4	50.2%	20%	0.7%	\$37,619	\$106,200
Price County	15,822	41.7	49.8%	13%	0.6%	\$35,249	\$70,100
Taylor County	19,680	37.4	49.4%	11%	0.2%	\$38,502	\$75,600
Vilas County	21,033	45.8	50.2%	18%	9.1%	\$33,759	\$120,200
Northwoods Region	165,665	41.2	50.0%	15%	2.2%	\$35,888	\$91,682

Source: Census 2000

Note: Regional "medians" represent the weighted average of constituent county medians;

Percent college educated calculated for persons age 25 and older; Housing value calculated for owner occupied housing units.

In comparison with other Regions, the Northwoods has a relatively old population. Median age for the state of Wisconsin as a whole is 36 years, compared to over 41 years in the Northwoods Region. The population in Vilas and Iron Counties is especially old, with a median age of over 45 years.

Sex and race are two more important demographic characteristics that might impact participation in outdoor recreation. In terms of sex ratios, the Northwoods has an equal number of females and males. Racially, the Northwoods is predominately (almost 96%) non-Hispanic and White. Concentrations of American Indians live on and near reservation land in Forest County (Potawatomi and Mole Lake Ojibwe Reservations) and Vilas County (Lac du Flambeau Ojibwe).







Income, housing values, and college education rates are relatively low in the Northwoods Region. No county in this Region has a median income within \$4,000 of the state median income. Iron County has the lowest median income in the Region. No county in the Northwoods Region is as college educated as the state average. Oneida County has the highest rate of college education, while Taylor and Forest Counties have the lowest rates of college education. While housing values in the Northwoods Region are lower, in general, than in the rest of the state, much variation exists within the Region. For instance, the median housing value in Vilas County (\$120,200) is higher than the state average; yet, the median value of housing is only \$58,900 in neighboring Iron County.



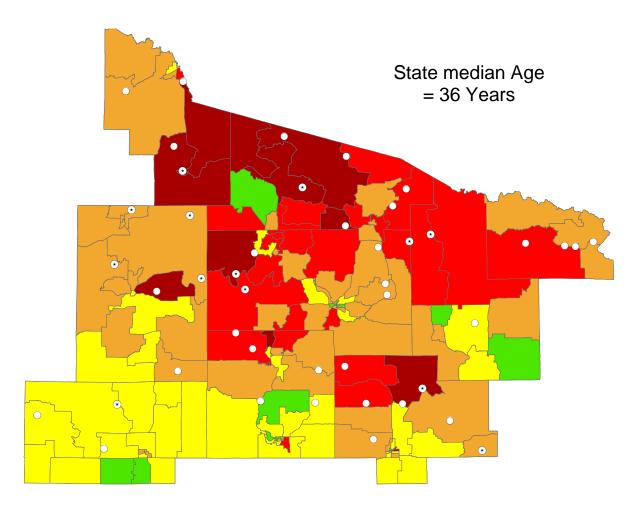


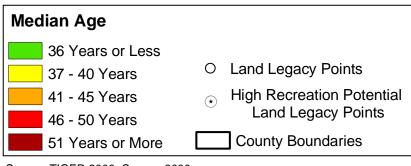


Figure 6

Median Age

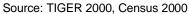
Calculated at Block Group Level













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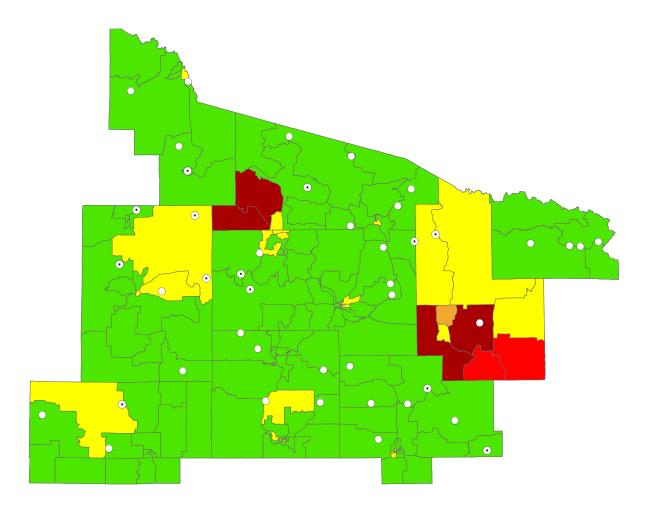


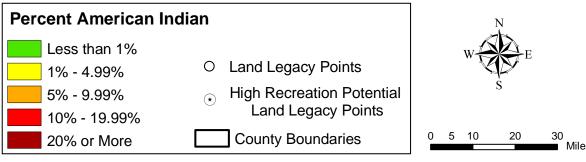


Figure 7

American Indian Population

Calculated at Block Group Level









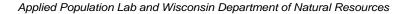
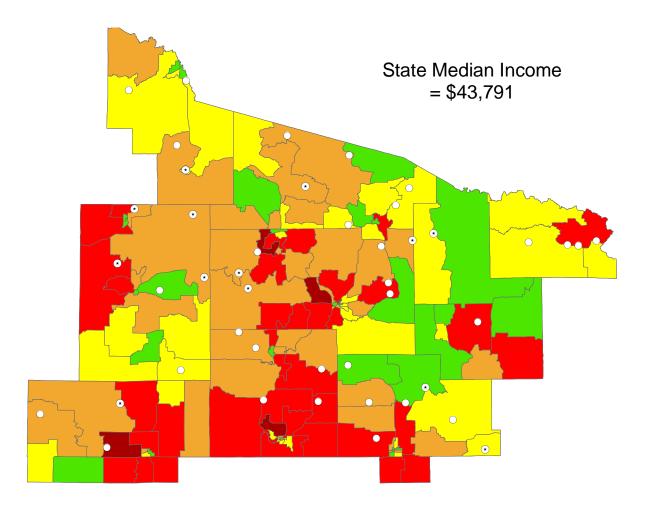


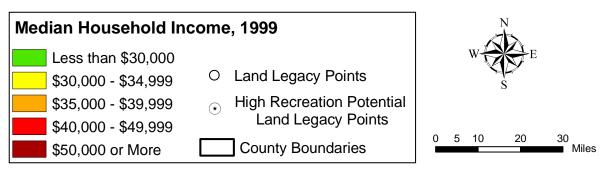


Figure 8

Median Income

Calculated at Block Group Level









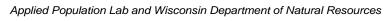


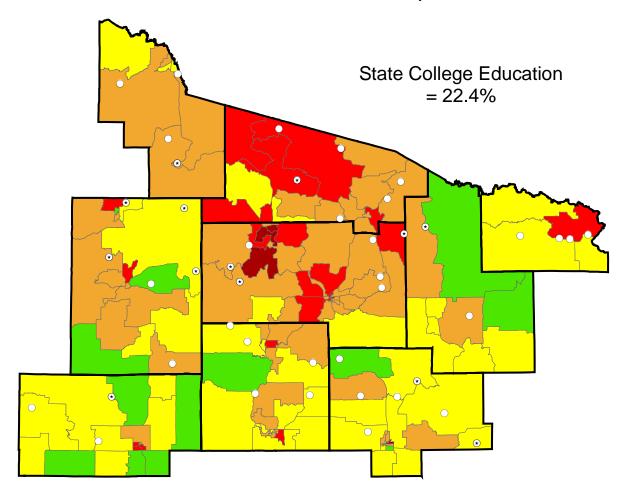




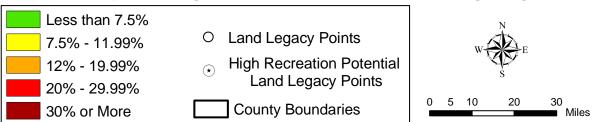
Figure 9

College Education

Calculated at Block Group Level



Percent of Population aged 25 or Older with a 4-Year College Degree



Source: TIGER 2000, Census 2000



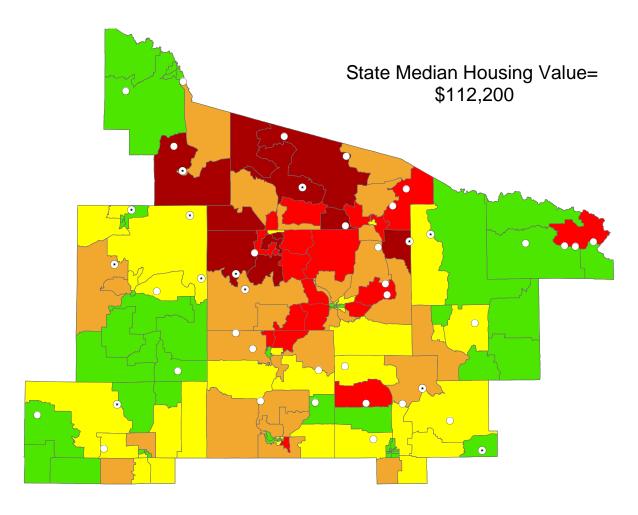


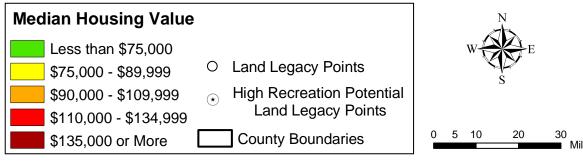


Figure 10

Median Housing Value

Calculated at Block Group Level





Source: TIGER 2000, Census 2000



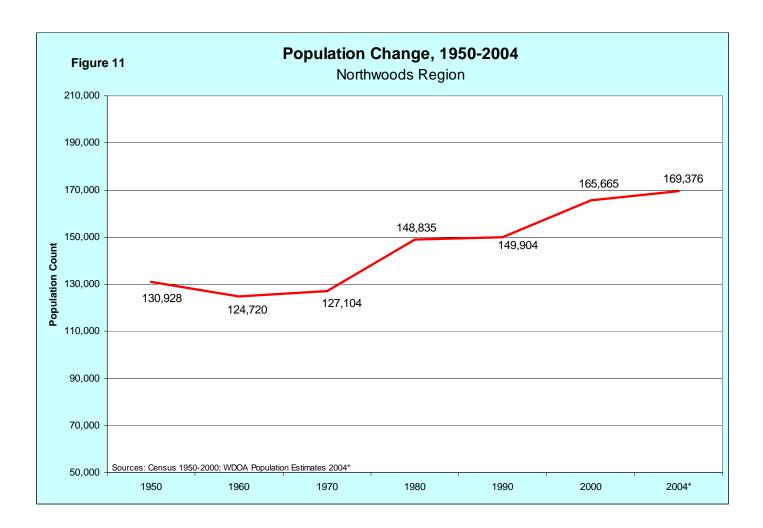
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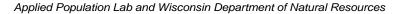
Looking at historical changes in population and housing may help to explain past and future trends in recreational participation. In this section, we examine demographic change in the Northwoods Region. We consider the growth, urbanization, and shifting age structure of the Northwoods population. In addition, we detail: where housing development has occurred, shifts in the prevalence of seasonal housing, and the impact that natural amenities (like lakes and forests) have had on population and housing growth.

POPULATION CHANGE

Although the Northwoods remains predominately rural, it has experienced population growth since 1970. Figure 11 shows Regional population counts from 1950-2004. Between 1970 and 2004, the Northwoods Region gained 42,272 people, increasing by 33% over the 34 year period. The rate of increase was fast in the 1970s and 1990s but has been slower over the last four years, growing by 2.2% between 2000 and 2004 (or 0.6% annually).











Population growth does not occur evenly across space, and while some parts of the Northwoods Region have continually experienced population growth, other areas have experienced decline. Table 4 shows population change over time by county. Forest, Oneida, and especially Vilas Counties have been growing quickly in recent decades. Iron, Price, and Langlade Counties have stagnated and even experienced some decline in population.

Table 4a

Population Counts over Time in the Northwoods Region

			Pop	oulation Co	unt		
	1950	1960	1970	1980	1990	2000	2004*
Florence County	3,756	3,437	3,298	4,172	4,590	5,088	5,214
Forest County	9,437	7,542	7,691	9,044	8,776	10,024	10,198
Iron County	8,714	7,830	6,533	6,730	6,153	6,861	6,948
Langlade County	21,975	19,916	19,220	19,978	19,505	20,740	21,227
Lincoln County	22,235	22,338	23,499	26,555	26,993	29,641	30,271
Oneida County	20,648	22,112	24,427	31,216	31,679	36,776	37,726
Price County	16,344	14,370	14,520	15,788	15,600	15,822	15,954
Taylor County	18,456	17,843	16,958	18,817	18,901	19,680	19,872
Vilas County	9,363	9,332	10,958	16,535	17,707	21,033	21,966
Northwoods Region	130,928	124,720	127,104	148,835	149,904	165,665	169,376

^{*} Estimate from Wisconsin Dept. of Administration

Sources: Census 1950-2000, Wisconsin Dept. of Administration, 2004

Table 4b
Population Change over Time in the Northwoods Region

		Populatio	n Change			Percent	Change		Avera	ge Annual F	ercent Incr	ease
	1950-1970	1970-1990	1990-2000	2000-2004	1950-1970	1970-1990	1990-2000	2000-2004	1950-1970	1970-1990	1990-2000	2000-2004
Florence County	-458	1,292	498	126	-12.2%	39.2%	10.8%	2.5%	-0.6%	2.0%	1.1%	0.6%
Forest County	-1,746	1,085	1,248	174	-18.5%	14.1%	14.2%	1.7%	-0.9%	0.7%	1.4%	0.4%
Iron County	-2,181	-380	708	87	-25.0%	-5.8%	11.5%	1.3%	-1.3%	-0.3%	1.2%	0.3%
Langlade County	-2,755	285	1,235	487	-12.5%	1.5%	6.3%	2.3%	-0.6%	0.1%	0.6%	0.6%
Lincoln County	1,264	3,494	2,648	630	5.7%	14.9%	9.8%	2.1%	0.3%	0.7%	1.0%	0.5%
Oneida County	3,779	7,252	5,097	950	18.3%	29.7%	16.1%	2.6%	0.9%	1.5%	1.6%	0.6%
Price County	-1,824	1,080	222	132	-11.2%	7.4%	1.4%	0.8%	-0.6%	0.4%	0.1%	0.2%
Taylor County	-1,498	1,943	779	192	-8.1%	11.5%	4.1%	1.0%	-0.4%	0.6%	0.4%	0.2%
Vilas County	1,595	6,749	3,326	933	17.0%	61.6%	18.8%	4.4%	0.9%	3.1%	1.9%	1.1%
Northwoods Region	-3,824	22,800	15,761	3,711	-2.9%	17.9%	10.5%	2.2%	-0.1%	0.9%	1.1%	0.6%

Sources: Census 1950-2000, Wisconsin DOA 2004

Figure 12 shows the average annual percent increase in population that municipalities experienced over four time periods. Data are fitted to 2003 municipal boundaries.



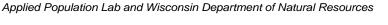
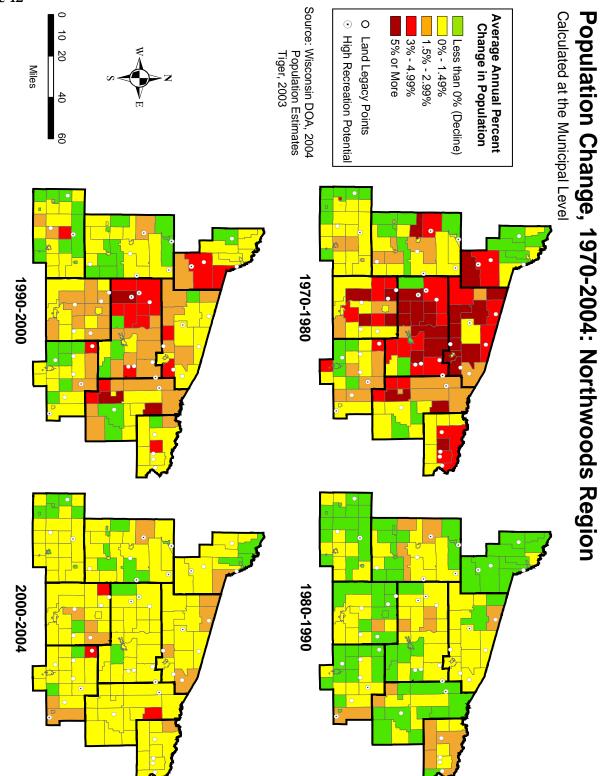








Figure 12





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Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us



AGE STRUCTURE

Demographers refer to the proportion of different aged people in the population as the population's age structure. Table 5 shows how median age has changed from 1950-2000 in the Northwoods Region. In general, the population has gotten much older over the last 50 years, with the median age increasing by more than 10 years for the Region as a whole. Most of this increase occurred between 1980 and 2000, as the Baby Boom generation began to reach older ages.

Table 5
Median Age in the Northwoods Region, 1950-2000

			Median	Age		
	1950	1960	1970	1980	1990	2000
Florence County	30.8	31.6	32.3	33.5	36.2	41.9
Forest County	26.8	30.8	29.5	31.1	35.7	39.9
Iron County	32.3	35.8	41.1	38.8	42.1	45.0
Langlade County	28.1	29.1	30.0	32.1	36.6	40.5
Lincoln County	30.8	31.6	31.0	31.7	34.9	38.9
Oneida County	31.2	30.1	32.3	33.5	38.7	42.4
Price County	31.7	34.3	35.1	33.5	36.8	41.7
Taylor County	26.9	26.0	27.0	28.6	32.3	37.4
Vilas County	33.0	36.1	38.6	39.0	42.9	45.8
Northwoods Region	29.9	31.0	32.2	33.1	37.1	41.2

Source: Census 1950-2000

Note: Regional medians are derived from the weighted median of the county median ages.

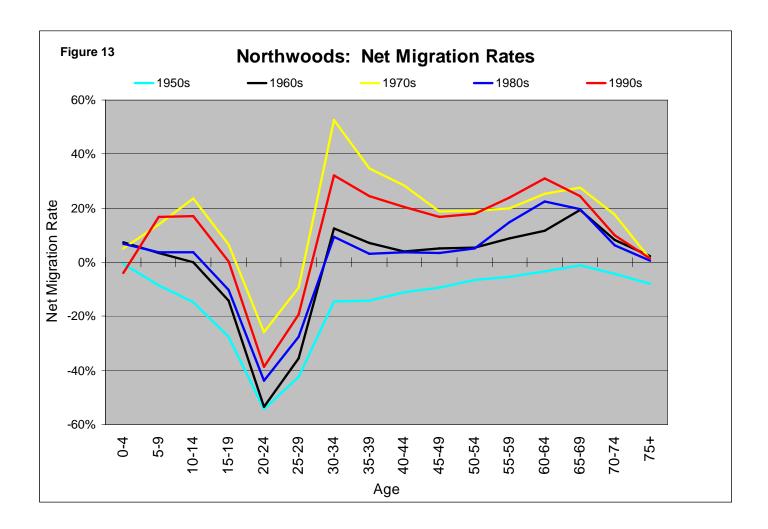
The aging of the population in the Northwoods is determined, in part, by migration patterns. Migration processes affect both population counts and the age structure of the population. The balance of in- and out-migration for a local area is known as "net migration." Net in-migration means that migration is contributing to (depending on natural increase in the specific area) population growth, while net out-migration would contribute to population decline. Migration especially impacts the age structure of a local population when people of different age groups experience opposite migration trends. For instance, young people tend to move out of more rural areas of the state; and older people tend to retire in natural amenity-rich rural areas. This means that many rural areas in Wisconsin are experiencing an aging population due, in part, to migration. Such age patterns will impact demand for different types of outdoor recreation.





NET MIGRATION BY AGE

Figure 13 summarizes age-specific net migration patterns for the Northwoods Region from 1950-2000. For example, in the 1950's the Northwoods experienced a net out-migration (below "0%" line) at every age group, especially of young adults. The 1950's net migration line tells us that the population aged 20-24 in 1960 was about 50% smaller than the population aged 10-14 in 1950. Between 1990 and 2000, the Northwoods still experienced a net loss of young adults, but saw a net increase in population at other age groups, especially of adults at early retirement age. Such migration patterns will influence the number of young adults and older people in the local population.







URBANIZATION

Over time the population of the U.S. and of Wisconsin has become increasingly urban. In 1900, about 38% of Wisconsin residents lived in urban areas. By 2000, this proportion had increased to 68%.

The urban population has increased more quickly than the rural population in the U.S. due to both natural increase and migration. In the past, rural residents tended to have more children than urban residents, but over the last several decades this trend has switched and urban areas have higher birth rates than rural ones. In 2003, Wisconsin metropolitan counties had 13.3 births for every 1,000 residents, while non-metropolitan counties had only 11.3 (calculated from Wisconsin Dept. of Health and Family Services data). In addition, people have tended to move out of rural areas and off farms into urban areas over the past several decades.

Table 6 shows the percent of the population living in urban areas 1950-2000. The declining proportion shown in the table below for the Northwoods contrasts with state and national-level trends. This is because the Region as a whole is quite rural, with no large metropolitan centers, and because the U.S. Census Bureau has changed the way it has defined "urban" over the years, making comparisons in more rural areas complicated.

Table 6
Urbanization in the Northwoods Region, 1950-2000

]	Percent Living in	ı Urban Areas		
	1950	1960	1970	1980	1990	2000
Florence County	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Forest County	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Iron County	34.8%	35.3%	0.0%	0.0%	0.0%	31.8%
Langlade County	45.1%	48.7%	46.9%	43.3%	42.4%	43.1%
Lincoln County	56.2%	57.3%	55.0%	49.4%	48.9%	44.9%
Oneida County	42.5%	39.8%	33.6%	25.2%	23.4%	26.2%
Price County	17.9%	20.3%	20.3%	20.2%	19.9%	0.0%
Γaylor County	15.2%	18.3%	20.4%	21.4%	22.7%	21.4%
Vilas County	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Northwoods Region	30.5%	32,2%	28.8%	24.8%	24.2%	23.1%

Source: Census 1950-2000

Note: Some of the differences shown here, may be the result of changes in the way "urban" is defined by the U.S. Census Bureau.





MINORITY GROUPS

Wisconsin, in general, has a predominately White/Non-Hispanic population (87% in 2000). Though the number of minority residents has been increasing over the last few decades, minority groups still constitute a small proportion of the population for most Regions.

In the Northwoods Region, 96% of the population identified as Non-Hispanic and White on the 2000 Census. American Indians made up the largest minority group in this Region, representing 2.2% of the total population.

Table 7 shows the American Indian population 1960-2000. The number of American Indians in the Northwoods Region increased from 1,388 residents in 1960 to 3,722 residents in 2000, for an overall increase of 168%. Most of this increase occurred in Forest, Oneida, and Vilas Counties.

Table 7
Changing Race and Ethnicity, 1960-2000

		Number of	American India	an Persons			Percent Change	;
	1960	1970	1980	1990	2000	1970-1980	1980-1990	1990-2000
Florence County	2	10	14	14	22	40.0%	0.0%	18.1%
Forest County	306	276	499	780	1,133	80.8%	56.3%	73.7%
Iron County	11	12	12	25	41	0.0%	108.3%	13.6%
Langlade County	60	139	98	137	113	-29.5%	39.8%	31.2%
Lincoln County	28	27	70	96	130	159.3%	37.1%	-2.4%
Oneida County	137	127	191	223	242	50.4%	16.8%	35.8%
Price County	12	26	51	77	95	96.2%	51.0%	-20.7%
Taylor County	13	10	29	39	37	190.0%	34.5%	20.1%
Vilas County	819	905	1,181	1,534	1,909	30.5%	29.9%	32.8%
Northwoods Region	1,388	1,532	2,145	2,925	3,722	40%	36%	27%
	•							

Source: Census 1950-2000

Note: Methods of data collection and reporting on race and ethnicity in the Census have changed over the years. Consequently, data for some years are not available or have been estimated, and some of the changes seen above may be artificial. Definitions were relatively stable between 1990 and 2000.

Note: Use of terminology and "labels" when talking about racial ethnic populations can be a sensitive issue. The authors of this report understand that there are some political, cultural and social preferences and implications in using particular terminology. We have chosen to use language that reflects Census-designated racial and ethnic categories in this report.

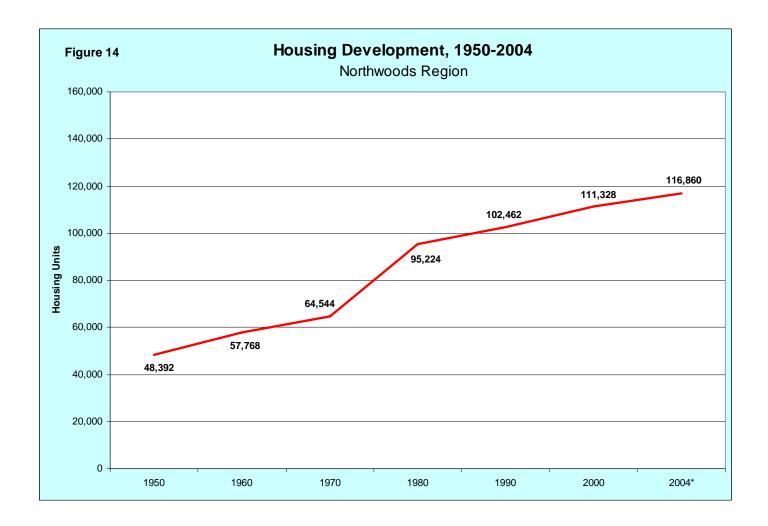




HOUSING DEVELOPMENT

Just as population in the Northwoods Region has increased over time, so too has housing development. Figure 14 and Table 8 show the trajectory of housing growth for the Region and by county between 1950 and 2004. The number of housing units increased from 48,392 units in 1950 to 116,860 in 2004, for an overall increase of 141%. The fastest rate of growth occurred in the 1970's, when housing units increased by 48% in one decade.

Vilas and Oneida Counties have consistently experienced rapid housing development since 1950. Between 1970 and 1990, the number of housing units in Vilas County more than doubled, increasing by 106% and adding more than 10,000 new housing units.





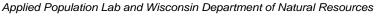






Table 8a

Housing Development over Time in the Northwoods Region

			Numbe	r of Housir	g Units		
	1950	1960	1970	1980	1990	2000	2004*
Florence County	1,623	1,735	2,118	3,341	3,775	4,239	4,468
Forest County	3,529	3,976	4,583	6,749	7,203	8,322	8,687
Iron County	2,786	3,701	3,747	5,098	5,243	5,706	5,918
Langlade County	7,099	7,070	7,819	9,821	10,825	11,187	11,714
Lincoln County	7,342	8,478	9,809	12,780	13,256	14,681	15,426
Oneida County	8,395	11,640	14,977	23,157	25,173	26,627	28,028
Price County	5,590	6,232	6,151	8,727	9,052	9,574	10,004
Taylor County	5,398	5,527	5,517	7,163	7,710	8,595	8,926
Vilas County	6,630	9,409	9,823	18,388	20,225	22,397	23,689
Northwoods Region	48,392	57,768	64,544	95,224	102,462	111,328	116,860

^{*} Estimate from Wisconsin Dept. of Administration

Sources: Census 1950-2000, Wisconsin Dept. of Administration, 2004

Table 8b
Housing Development over Time in the Northwoods Region

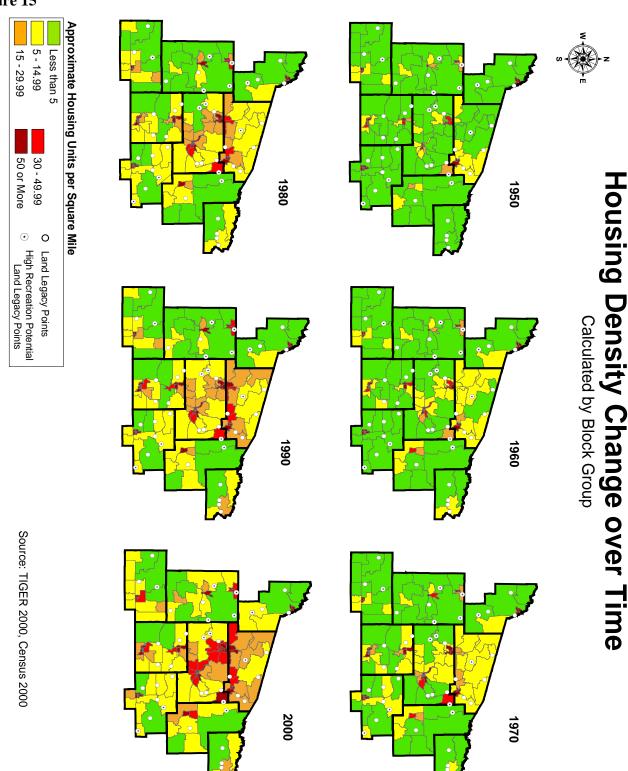
		Housing U	nit Change			Percent	Change		Avera	ge Annual F	ercent Incr	ease
	1950-1970	1970-1990	1990-2000	2000-2004	1950-1970	1970-1990	1990-2000	2000-2004	1950-1970	1970-1990	1990-2000	2000-2004
Florence County	495	1,657	464	229	30.5%	78.2%	12.3%	5.4%	1.5%	3.9%	1.2%	1.4%
Forest County	1,054	2,620	1,119	365	29.9%	57.2%	15.5%	4.4%	1.5%	2.9%	1.6%	1.1%
Iron County	961	1,496	463	212	34.5%	39.9%	8.8%	3.7%	1.7%	2.0%	0.9%	0.9%
Langlade County	720	3,006	362	527	10.1%	38.4%	3.3%	4.7%	0.5%	1.9%	0.3%	1.2%
Lincoln County	2,467	3,447	1,425	745	33.6%	35.1%	10.7%	5.1%	1.7%	1.8%	1.1%	1.3%
Oneida County	6,582	10,196	1,454	1,401	78.4%	68.1%	5.8%	5.3%	3.9%	3.4%	0.6%	1.3%
Price County	561	2,901	522	430	10.0%	47.2%	5.8%	4.5%	0.5%	2.4%	0.6%	1.1%
Taylor County	119	2,193	885	331	2.2%	39.7%	11.5%	3.9%	0.1%	2.0%	1.1%	1.0%
Vilas County	3,193	10,402	2,172	1,292	48.2%	105.9%	10.7%	5.8%	2.4%	5.3%	1.1%	1.4%
Northwoods Region	16,152	37,918	8,866	5,532	33.4%	58.7%	8.7%	5.0%	1.7%	2.9%	0.9%	1.2%

Figure 15 shows housing density between 1950 and 2000 at the Census Block Group level. The maps show the approximate number of housing units per square mile in each decade. We can see how the landscape has gradually filled up with increasing numbers of homes, especially in the north-central part of the Northwoods Region, in Vilas and Oneida Counties.



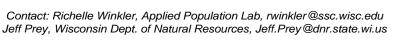


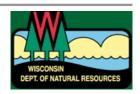
Figure 15





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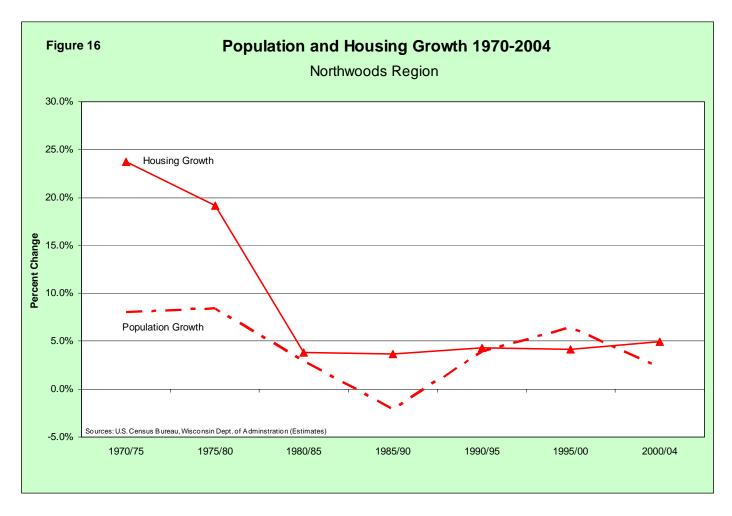




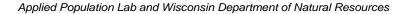
Assuming that more people need more houses, we would expect housing growth to occur in relation to population growth. In reality, housing development depends on factors other than population growth, such as: seasonal housing, interest rates, decisions of policy makers and residential developers, and the number of people per household. For this reason, housing growth sometimes outpaces population growth, and vice versa.

Figure 16 shows how housing development has occurred with relation to population growth over the last few decades in the Northwoods Region. The chart shows the percent change in each time period, with 0% meaning that the number of housing units and/or population in the Region did not change at all, negative percentages depict a decline, and positive percentages show percent of increase.

In the 1970's housing growth occurred at a rapid rate. In 1975 the number of housing units in the Region was about 24% higher than the number of housing units in 1970, while the number of people in 1975 was about 8% higher than the number of people in 1970. Housing development has consistently outpaced population growth in the Northwoods Region (except for in the late 1990's), in part because of the high proportion of seasonal-use homes in the Region.









SEASONAL HOUSING

Over that last 50 years, seasonal housing has increasingly become an important factor when thinking about outdoor recreation in the Northwoods. Table 9 shows the percent of all housing units that were for seasonal use 1950-2000.

The number of seasonal homes increased dramatically between 1950 and 1990, from 9,404 homes to 38,443 (an increase of 309%). Then, between 1990 and 2000, the number of seasonal homes dropped, due to conversion into full-time residencies. During the 1990's many people chose to retire and live full-time in homes that were previously only for seasonal use. Despite this recent drop, seasonal housing remains an important factor to consider for outdoor recreation in the Northwoods Region, with 34% of all housing units being for seasonal use.

Table 9
Seasonal Housing in the Northwoods Region, 1950-2000

		Num	ber of Seasor	nal Housing U	nits		Per	rcent Seaso	nal
	1950	1960	1970	1980	1990	2000	1960	1980	2000
Florence County	377	632	546	1,704	1,860	1,959	36%	51.0%	46.2%
Forest County	753	1,538	1,642	3,311	3,576	3,856	39%	49.1%	46.3%
Iron County	141	1,082	817	2,002	1,945	2,159	29%	39.3%	37.8%
Langlade County	886	1,034	2,233	2,347	2,594	2,158	15%	23.9%	19.3%
Lincoln County	696	1,479	980	2,831	2,521	1,949	17%	22.2%	13.3%
Oneida County	1,916	4,629	4,787	10,695	11,263	10,429	40%	46.2%	39.2%
Price County	454	1,380	1,309	2,374	2,378	2,519	22%	27.2%	26.3%
Taylor County	3,552	413	625	624	674	704	7%	8.7%	8.2%
Vilas County	629	6,115	1,916	11,351	11,632	12,587	65%	61.7%	56.2%
Northwoods Region	9,404	18,302	14,854	37,239	38,443	38,320	32%	39.1%	34.4%

Source: Census 1950-2000

Note: Data collection and reporting on seasonal housing have changed over the years. Consequently, data for some years have been estimated.

Note: Because of changing Census definitions and compilation methods over time, the data shown here are not perfectly comparable between decades, and they do not represent the exact truth. Rather, these data are estimates of the actual proportions of seasonal housing units, and they offer a general understanding of how seasonal housing has fluctuated over the time period.







NATURAL AMENITIES, RECREATION AND POPULATION CHANGE

Researchers (i.e. David McGranahan, Calvin Beale, and Ken Johnson) have found evidence that natural amenities (like climate, topography, forests, lakes, and rivers) and recreational resources are associated with population growth in some rural areas. The idea is that many people are attracted to natural amenities and want to live in or near places that offer natural beauty and recreational opportunities. According to this line of thought, we might expect areas rich in natural amenities to experience disproportionately high population and housing growth. This is important to consider because population and housing growth in these amenity rich areas will impact the supply and demand for outdoor recreation, as well as the integrity of the natural environment.

We can get an idea of what the capacity for such amenity-based growth might be the Northwoods Region by looking at land cover. Table 10 shows land cover types in the Northwoods Region, as they existed in 1992. The Region is heavily forested and has a significant amount of inland water (lakes and rivers) and wetlands. Few areas have urban development, and agricultural use is largely restricted to Taylor, Langlade, and Lincoln Counties.

Table 10

Land Cover in the Northwoods Region

	Urban	Agricultural	Grassland	Forest	Water	Wetland	Barren	Shrubland
Florence County	0.1%	3.0%	3.6%	76.0%	2.3%	14.1%	0.3%	0.6%
Forest County	0.2%	2.0%	3.1%	69.4%	3.0%	21.5%	0.4%	0.4%
Iron County	0.1%	0.4%	3.0%	59.1%	6.0%	29.0%	0.8%	1.7%
Langlade County	0.5%	13.3%	7.9%	57.0%	1.6%	18.2%	0.9%	0.6%
Lincoln County	0.6%	7.3%	7.4%	58.1%	2.5%	20.7%	2.7%	0.7%
Oneida County	0.5%	1.4%	3.1%	50.8%	8.5%	29.0%	3.0%	3.6%
Price County	0.2%	3.6%	7.2%	54.4%	2.3%	30.5%	0.9%	0.8%
Taylor County	0.3%	19.8%	8.3%	49.5%	1.7%	18.7%	1.1%	0.6%
Vilas County	0.4%	0.7%	1.7%	62.4%	14.2%	16.8%	1.1%	2.6%
Northwoods Region	0.3%	5.6%	5.1%	58.4%	4.9%	22.9%	1.3%	1.4%
Wisconsin State	1.6%	30.8%	10.7%	37.5%	3.4%	14.1%	1.1%	0.9%

Source: Wisconsin DNR Wiscland, 1998

In their research, Beale and Johnson have identified non-metropolitan counties that have a great deal of tourism, recreation and entertainment, and seasonal housing. They call these counties "Nonmetro Recreation Counties," and they find that across the U.S., Recreation Counties have experienced especially high net migration rates, and higher population growth rates than either metropolitan counties or other non-metropolitan counties (Johnson and Beale, 2002).

The Northwoods Region has several Recreation Counties including: Florence, Forest, Iron, Oneida, Price, and Vilas Counties. Vilas, Oneida, Florence, and Forest Counties have consistently grown at a faster rate than other counties in the Northwoods. They also are the counties with the most forest (Florence County- 76%, Forest County- 69%) and the most water (Vilas- 14%, Oneida County- 9%). Table 11 compares population and housing change over time in Recreation Counties to other counties in the Northwoods.







Table 11
Natural Amenities, Recreation, and Population Change: Northwoods Region

	Land Cover		Population Change			Housing Change		
	% Forest	% Water	1970-1990	1990-2000	2000-2004	1970-1990	1990-2000	2000-2004
Recreation Counties								
Florence County	76.0%	2.3%	39.2%	10.8%	2.5%	3.9%	1.2%	1.4%
Forest County	69.4%	3.0%	14.1%	14.2%	1.7%	2.9%	1.6%	1.1%
Iron County	59.1%	6.0%	-5.8%	11.5%	1.3%	2.0%	0.9%	0.9%
Oneida County	50.8%	8.5%	29.7%	16.1%	2.6%	3.4%	0.6%	1.3%
Price County	54.4%	2.3%	7.4%	1.4%	0.8%	2.4%	0.6%	1.1%
Vilas County	62.4%	14.2%	61.6%	18.8%	4.4%	5.3%	1.1%	1.4%
Other Counties								
Langlade County	57.0%	1.6%	1.5%	6.3%	2.3%	1.9%	0.3%	1.2%
Lincoln County	58.1%	2.5%	14.9%	9.8%	2.1%	1.8%	1.1%	1.3%
Taylor County	49.5%	1.7%	11.5%	4.1%	1.0%	2.0%	1.1%	1.0%

Sources: Census 1950-2000; Wisconsin Dept. of Administration, 2004; Wisconsin DNR WiscLand, 1998

It is important to note that several other factors (in addition to land cover and recreational opportunity) impact population and housing growth. For instance, distance from major cities and transportation routes also play large roles in determining population and housing growth rates. Because the Northwoods Region is isolated from large metropolitan areas, population growth might be limited. Natural amenity-based population growth may be expected to occur in areas of the Northwoods with a combination of many lakes and much forested land *and* access to these amenities via transportation routes and other built infrastructure.







The Wisconsin DOA provides population projections at the municipality and county levels. At the county level, they provide these projections by age, allowing us to estimate county median ages for coming years. According to these projections, the population of the Northwoods Region will continue to slowly increase in size and continue escalating in median age over the next several years.

POPULATION PROJECTIONS

By 2010 the Region's population is projected to grow to 170,777 residents, an increase of 0.8% over the 2004 population (see Table 12). By 2020 the population of the Northwoods is projected to reach 173,816. Florence, Langlade, and Oneida Counties are projected to have the highest rates of increase in the Northwoods Region, while Iron and Price Counties are projected to experience decline, and Vilas County is projected to experience only slow population growth in comparison to the rapid increase it has seen in the recent past.

Table 12
Population Projections for the Northwoods Region

	Estimate	Proje	ction	Projected	Increase	Average Annual % Increase		
	2004	2010	2020	2004-2010	2010-2020	2004-2010	2010-2020	
Florence County	5,214	5,348	5,444	134	96	0.43%	0.18%	
Forest County	10,198	10,350	10,465	152	115	0.25%	0.11%	
Iron County	6,948	6,830	6,719	-118	-111	-0.28%	-0.16%	
Langlade County	21,227	21,616	22,244	389	628	0.31%	0.29%	
Lincoln County	30,271	30,511	31,232	240	721	0.13%	0.24%	
Oneida County	37,726	38,284	39,254	558	970	0.25%	0.25%	
Price County	15,954	15,831	15,728	-123	-103	-0.13%	-0.07%	
Taylor County	19,872	19,998	20,459	126	461	0.11%	0.23%	
Vilas County	21,966	22,009	22,271	43	262	0.03%	0.12%	
Northwoods Region	169,376	170,777	173,816	1,401	3,039	0.14%	0.18%	

Source: Wisconsin Dept. of Administration, 2004

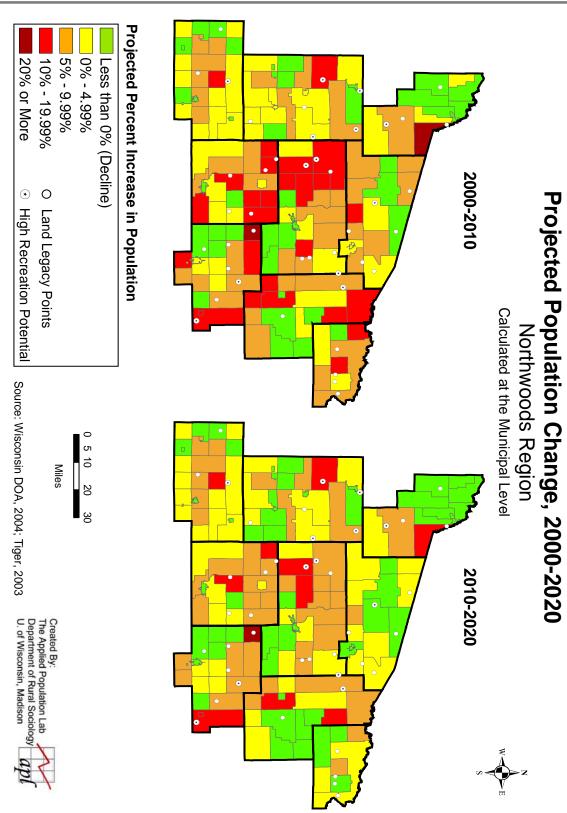
Figure 17 shows the percent increase in population projected to occur at the municipality level 2000-2010 and 2010-2020. Growth is projected to occur most in the western part of Oneida County (especially in the Towns of Little Rice and Cassian), in the northern part of Lincoln County (especially in the Towns of Soma and Rock Falls), and in other pockets throughout the Region including: the Towns of Parrish and Wolf River in Langlade County, the Town of Oma in Iron County, the Town of Molitor in Taylor County, the Towns of Popple River and Lincoln in Forest County, and the Town of Flambeau in Price County.

Land legacy points are located in and around some areas expected to experience high growth in coming years. These include: Prairie River in the Town of Parrish, Gile Flowage in the Town of Oma, and the Upper Wisconsin River in the Town of Rock Falls. High recreation potential Land Legacy points that are expected to experience high rates of population growth include: the Willow Flowage in the Town of Little Rice, the Upper Wolf River in the Town of Wolf River, and the Upper Forks of the Flambeau River in the Town of Flambeau.





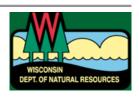
Figure 17





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AGE PROJECTIONS

As mentioned previously, the population in the Northwoods Region is substantially older than the state of Wisconsin as a whole. Projections suggest that the aging trend will continue in the coming years. Table 13 shows observed and projected median age for counties in the Northwoods Region 2000-2010. While population across the state of Wisconsin is also projected to grow older over the next few years, population in the Northwoods Region is projected to age two to four times faster than the rest of the state. Aging is projected to occur particularly quickly in Florence County and more slowly in Lincoln County.

By 2010, median age is projected to reach 45.7 years in the Northwoods Region and over 50 years in Iron and Vilas Counties.

Table 13
Median Age in the Northwoods Region, 2000-2010

	Observed	Projected		Change	
	2000	2005	2010	2000-2005	2005-2010
Florence County	42	45	48	3	3
Forest County	40	43	45	3	2
Iron County	45	48	50	3	2
Langlade County	41	43	45	2	2
Lincoln County	39	41	42	2	1
Oneida County	42	45	47	3	2
Price County	42	44	47	2	3
Taylor County	37	39	41	2	2
Vilas County	46	48	51	2	3
Northwoods Region	39.7	43.6	45.7	3.9	2.1
Wisconsin State	36.0	37.0	38.0	1.0	1.0

Source: Wisconsin Dept. of Administration, 2004

Projected Median Age is estimated from the D.O.A. age-specific population projections, 2004





CONCLUSIONS

The Northwoods is a rural Region in the state of Wisconsin. Within the Region, population is dispersed across several small cities and villages and in rural towns. Housing is concentrated in the cities and villages and also around the Region's many lakes. The Northwoods Region has experienced population and housing growth over the last few decades and is projected to continue to experience growth (though less rapid) in the coming years.

In the Northwoods, population is substantially older than the rest of the state and is projected to continue to age in the coming years. Income, housing values, and education rates are relatively low in the Region. Seasonal housing and tourism are prevalent and are important factors to consider in measuring demand for outdoor recreation in the area.

Based on the information shown in this report and from survey data (NSRE 2000-2004) that relates demographic characteristics to participation in outdoor recreational activities, we can make some assumptions about the types of outdoor recreation that are popular in the Northwoods Region and how this relates to geographic and demographic characteristics of the Region. Geographically, we might expect rates of participation in water-based and snow/ice related activities to be high because of the large number of inland lakes in the Region and because the Region is located in the northern part of the state that has colder temperatures and more snow in the winter months. Similarly, wilderness and wildlife-based activities may be particularly prominent in the Region because of the rural nature of the landscape and access to public land.

Demographically, the Northwoods Region is relatively old, rural, has low income and education rates. Older people tend to participate in viewing or photographing natural scenery (and birds in particular) more than younger people. Ice fishing is also more popular among people aged 45-64 than with younger people. People who live in non-metropolitan areas participate disproportionately in ice fishing, snowmobiling, target shooting, driving for pleasure, driving off-road, driving ATV's, playing volleyball outdoors, and gathering berries and other natural goods. People with lower education levels participate in snowmobiling and paintball games at relatively high rates. These activities might be particularly popular in the Northwoods Region, in part because of the demographic structure of the Region. However, seasonal residents tend to differ dramatically from full-time residents, particularly in terms of income and education. Seasonal residents (usually clustered around lakes) might be expected to participate most in water-based activities.

National Survey on Recreation and the Environment (NSRE): 2000-2004. Versions 1-18 (except 12 & 17), N=2935. Interview dates: 7/99 to 11/04. The Interagency National Survey Consortium, Coordinated by the USDA Forest Service, Recreation, Wilderness, and Demographics Trends Research Group, Athens, GA, the Human Dimensions Research Laboratory, University of Tennessee, Knoxville, TN.



